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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/828,837	04/10/2001	Kinya Aota	503.35933VV5	1020

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EXAMINER

SIMONE, CATHERINE A

ART UNIT	PAPER NUMBER
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1772

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DATE MAILED: 04/17/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/828,837

Applicant(s)

AOTA ET AL.

Examiner

Catherine Simone

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 14-23 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 14-23 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 7.
- 4) ☐ Interview Summary (PTO-413) Paper No(s) ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

2. **Claims 14, 16-20, 22 and 23** are rejected under 35 U.S.C. 102(a) as being anticipated by Aota et al. (EP 0 797 043).

Aota et al. discloses an extruded frame member for use in friction stir welding, the extruded frame member including at least one plate (Fig. 7, #33), wherein at least one end portion of a width of the at least one plate of the extruded frame member is provided respectively with a thickened part (Fig. 7, #37a) which protrudes from a side of the at least one plate (Fig. 7, #33) of the extruded frame member, in a thickness direction of the at least one plate of the extruded frame member; and the extruded frame member further includes an extruded part extending from the thickened part (Fig. 7, #36), substantially in parallel to the at least one plate (Fig. 7, #33) of the extruded frame member, and extending beyond (Fig. 7, #37) the at least end one portion of the width of the at least one plate (Fig. 7, #33) of the extruded frame member, in a direction of the width of the at least one plate of the extruded frame member. Regarding **claim 16**, note the extruded part (Fig. 7, #36) is positioned at a side end of the thickened part (Fig. 7, #37). Regarding **claim 17**, note at least one plate (Fig. 7, #33) of the extruded frame member, the thickened part (Fig. 7, #37a) and the extruded part (Fig. 7, #36) are formed integrally as one

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body. Regarding **claim 18**, note an outer surface of the thickened part (Fig. 7, #37a) and an outer surface of the extruded part (Fig. 7, #36) are coplanar. Regarding **claim 19**, note at an end side of the at least one plate of the extruded frame member (Fig. 7, #33) and under the extruded part (Fig. 7, #36) of the extruded frame member, at least one plate of another extruded frame member (Fig. 7, #34) is adapted to be positioned, and the end side of the at least one plate of the extruded frame member (Fig. 7, #33) is adapted to be abutted to an end side of the at least one plate of the another extruded frame member, for carrying out a friction stir welding of the extruded frame member and the another extruded frame member. Regarding **claim 22**, note the thickened part (Fig. 7, #37a) has a width that is substantially equal to a width of the extruded part (Fig. 7, #36). Regarding **claim 23**, note a side surface of the extruded part (Fig. 7, #36), furthest from the thickened part (Fig. 7, #37a) and a side surface of the thickened part (Fig. 7, #37a), furthest from the extruded part (Fig. 7, #36) extend obliquely.

Regarding **claims 19 and 20**, it has been held that the recitation that an element is “adapted to” perform a function is not a positive limitation but only requires the ability to so perform. It does not constitute a limitation in any patentable sense. *In re Hutchison*, 69 USPQ 138.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. **Claims 15 and 21** are rejected under 35 U.S.C. 103(a) as being unpatentable over Aota et al. (EP 0 797 043).

Aota et al. discloses an extruded frame member for use in friction stir welding, the extruded frame member including at least one plate (Fig. 7, #33), wherein at least one end portion of a width of the at least one plate of the extruded frame member is provided respectively with a thickened part (Fig. 7, #37a) which protrudes from a side of the at least one plate (Fig. 7, #33) of the extruded frame member, in a thickness direction of the at least one plate of the extruded frame member; and the extruded frame member further includes an extruded part extending from the thickened part (Fig. 7, #36), substantially in parallel to the at least one plate (Fig. 7, #33) of the extruded frame member, and extending beyond (Fig. 7, #37) the at least end one portion of the width of the at least one plate (Fig. 7, #33) of the extruded frame member, in a direction of the width of the at least one plate of the extruded frame member; and a groove (Fig. 8, #45) is formed between an outer surface of the thickened part (Fig. 7, #37a) and an outer surface of the extruded part (Figs. 7 and 8, #36). However, Aota et al. fails to disclose the groove being of a triangular shape.

Normally, it is to be expected that a change in shape of the groove would be an unpatentable modification. Under some circumstances, however, changes such as shape may impart patentability to a product if the particular shape claimed produces a new and unexpected result which is different in kind and not merely in degree from the results of the prior art. *In re Dailey et al*, 149 USPQ 47 CCPA 1966.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the applicant's invention was made to change the shape of the groove noted in Aota et al. to a

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triangular shape. One skilled in the art would have been motivated to do so in order to form an extruded frame member, since it has been held that the change in shape or form of the groove would be an unpatentable modification absence of showing unexpected results.

Regarding **claim 21**, note the thickened part (Fig. 7, #37a) has a width that is substantially equal to a width of the extruded part (Fig. 7, #36).

Conclusion

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Catherine Simone whose telephone number is (703) 605-4297. The examiner can normally be reached on 9:30-6:00.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Harold Pyon can be reached on (703) 308-4251. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9310 for regular communications and (703) 872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.



Catherine Simone
Examiner
Art Unit 1772

April 9, 2003



HAROLD PYON
SUPERVISORY PATENT EXAMINER
1772

4/14/03